इंटरनेट मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”
Mazdoor Kisan Shakti Sangathan
“The Right to Information, The Right to Live”

“पुराने को छोड नये के तरफ”
Jawaharlal Nehru
“Step Out From the Old to the New”

IS 8863-1 (1978): Leather sealing cups: Part 1 'U' cups
[CHD 17: Leather, Tanning Materials and Allied Products]

“ज्ञान से एक नये भारत का निर्माण”
Satyanarayan Gangaram Pitroda
“Invent a New India Using Knowledge”

Act Number 22 of 2005
The Indian Parliament
RIGHT TO INFORMATION

Made Available By
Public.Resource.Org

“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”
Bhartṛhari—Nītiśatakam
“Knowledge is such a treasure which cannot be stolen”

BLANK PAGE

BRUTUM FULMEN

IGNORANTIA JURIS NON EXCUSAT

PROTECTED BY COPYRIGHT

IS : 8863 (Part I) - 1978
(Reaffirmed 2000)

Indian Standard
SPECIFICATION FOR LEATHER SEALING CUPS
PART I 'U' CUPS

UDC 621-762·3 [675·06]

© *Copyright* 1979

INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

~~Price Rs 7·00~~ Gr 4

January 1979

Indian Standard
SPECIFICATION FOR LEATHER SEALING CUPS
PART I ‘U’ CUPS

Leather Sectional Committee, CDC 16

Chairman	*Representing*
DR M. SANTAPPA	Council of Scientific & Industrial Research, New Delhi
Members	
SHRI R. K. AGARWAL	Leather Research & Testing Laboratory, Directorate of Industries, Kanpur
SHRI K. S. UNNY (*Alternate*)	
SHRI DILIP BANERJEE	Indian Leather Technologists Association, Calcutta
SHRI P. K. SARKAR (*Alternate* I)	
SHRI S. S. DUTTA (*Alternate* II)	
SHRI A. S. BHATTACHARYA	Ministry of Defence (DGOF)
SHRI S. SAMPATH (*Alternate*)	
SHRI B. R. DAS GUPTA	Bata India Ltd, Calcutta
SHRI A. K. MATHUR (*Alternate*)	
SHRI O. P. DHAMIJA	Export Inspection Council of India, Calcutta
SHRI C. D. VASANTRAJ (*Alternate*)	
SHRI T. N. GANJWAR	India Leather Corporation Ltd, Madras
SHRI R. S. GHOSH	Directorate General of Technical Development, New Delhi
SHRI J. S. BISHT (*Alternate*)	
SHRI N. KANNAN	Ministry of Defence (R&D)
SHRI P. U. K. MENON	Gordon Woodroffe & Co (Madras) Pvt Ltd, Madras
SHRI G. P. MADHAVAN (*Alternate*)	
SHRI S. NAGARAJAN	Development Commissioner, Small Scale Industries, New Delhi
SHRI S. P. SINGARAM (*Alternate*)	
SHRI A. D. PARPIA	Leather Export Promotion Council, Madras
SHRI A. A. RASHEED (*Alternate*)	
PRINCIPAL, COLLEGE OF LEATHER TECHNOLOGY, CALCUTTA	Department of Education, Government of West Bengal, Calcutta
SHRI S. RAJA	The Tanner, Bangalore
SHRI N. R. MURALIDHARA RAO	Directorate of Marketing and Inspection (Ministry of Agriculture), Nagpur
SHRI S. JAYARAMAN (*Alternate*)	

(*Continued on page* 2)

© *Copyright* 1979
INDIAN STANDARDS INSTITUTION
This publication is protected under the *Indian Copyright Act* (XIV of 1957) and reproduction in whole or in part by any means except with written permission of the publisher shall be deemed to be an infringement of copyright under the said Act.

(*Continued from page* 1)

Members	*Representing*
Shri G. Roy Chaudhury	Export Promotion Council for Finished Leather & Leather Manufactures, Kanpur
Shri B. D. Sengupta (*Alternate*)	
Shri S. R. Saha	Ministry of Defence (DGI)
Shri M. Haq (*Alternate*)	
Shri A. K. Sen	The State Trading Corporation of India Ltd, New Delhi
Shri Sanjoy Sen	National Tannery Co Ltd, Calcutta
Shri B. P. Sengupta	Directorate General of Supplies & Disposals, New Delhi
Shri A. T. Basak (*Alternate*)	
Shri J. Sinha Roy	Tannery & Footwear Corporation of India Ltd, Kanpur
Dr G. M. Saxena, Director (Chem)	Director General, ISI (*Ex-officio Member*)

Secretary

Shri S. Das Gupta

Assistant Director (Chem), ISI

Industrial Leather and Mouldable Leather Articles Subcommittee, CDC 16 : 9

Convener	
Shri Sanjoy Sen	National Tannery Co Ltd, Calcutta
Members	
Shri S. M. De	College of Leather Technology, Government of West Bengal, Calcutta
Shri T. S. Kailash Mahadevan	Central Leather Research Institute (CSIR), Madras
Shri P. U. K. Menon	Gordon Woodroffe & Co (Madras) Pvt Ltd, Madras
Shri G. P. Madhavan (*Alternate*)	
Shri S. P. Pandit	Western India Tanneries Ltd, Bombay
Shri V. P. Pandit (*Alternate*)	
Shri S. K. Ponnusami	S. K. Senjan Chattiar & Sons, Vaniyambadi
Shri V. Ramanathan (*Alternate*)	

Indian Standard
SPECIFICATION FOR LEATHER SEALING CUPS

PART I ' U ' CUPS

0. FOREWORD

0.1 This Indian Standard (Part I) was adopted by the Indian Standards Institution on 27 June 1978, after the draft finalized by the Leather Sectional Committee had been approved by the Chemical Division Council.

0.2 Leather sealing cups are used as gland packings for pneumatic and hydraulic system presses. All control valves in hydraulic system presses have leather cups as gland packings.

0.3 This standard lays down specification for leather cups of cross section ' U ' and circular in shape mainly used for hydraulic forging presses. This is an imported item. The Leather Sectional Committee took note of the difficult availability of leather cups giving reasonable performance and decided to formulate this standard so as to guide manufacturers in developing the item of acceptable quality within the country.

0.4 In formulating this standard assistance has been derived from the CSN: 029262 'Leather cups ' U ' (doubled)', issued by the Czechoslovakia Standards Organization.

0.5 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard (Part I) prescribes requirements and methods of sampling and test for leather sealing cups, ' U ' type (double).

2. TERMINOLOGY

2.1 For the purpose of this standard, the definitions given in IS : 1640-1960† shall apply.

---

*Rules for rounding off numerical values (*revised*).

†Glossary of terms relating to hides, skins and leather.

3. REQUIREMENTS

3.1 Raw Material — Leather ' U ' cups shall be manufactured from leather of thickness 2 to 4 mm conforming to IS : 3020-1967*. The type of leather used shall be as agreed to between the purchaser and the supplier.

3.2 Free Fatty Acid — Free fatty acid (as oleic acid) content of the leather used in the manufacture of leather sealing cups shall not be more than 2 percent by mass. For this determination, the cups shall be extracted with petroleum hydrocarbon solvent according to the method LC : 4 of IS : 582-1970† and free fatty acid shall be determined in the extract according to the method prescribed in **7** of IS : 548 (Part I)-1964‡.

3.3 Shape and Dimensions — The shape and dimensions of leather ' U ' cups shall conform to Fig. 1 and Table 1 respectively. The working dimensions shall be selected in accordance with Table 1, depending on its specific use. In case of dispute samples shall be conditioned at a temperature of 27 ± 2°C and relative humidity 65 ± 5 for 48 hours before checking the measurement.

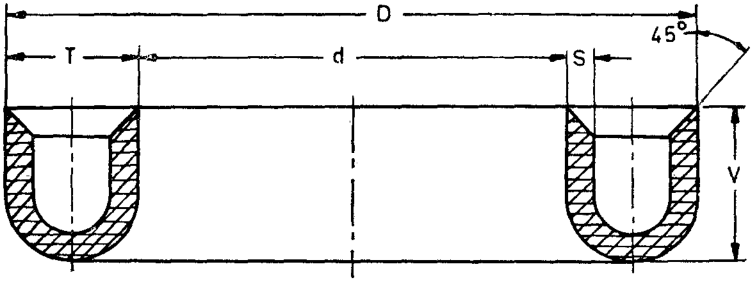

FIG. 1 CROSS-SECTIONAL VIEW OF LEATHER ' U ' CUPS (DOUBLE)

3.4 Assembly — The number of cups per assembly shall be one with metallic supporting (holding down) rings and generally stainless steel spindle.

3.5 Performance — The leather ' U ' cups shall give satisfactory performance for a minimum period of 3 months from the date of use, under the working conditions recommended in **3.5.1**.

---

*Specification for leather for oil seals (*first revision*).

†Methods of chemical testing of leather (*first revision*).

‡Methods of sampling and test for oils and fats: Part I Methods of sampling, physical and chemical tests (*revised*).

3.5.1 Unless otherwise specified, the leather ' U ' cups are expected to conform to **3.5** under the following working conditions:

a) Working pressure: 350 atmospheres;

b) Hydraulic medium: water with cutting oil (2 percent *v/v*);

c) Working temperature of water, *Max* : 60°C;

d) Working edge; inner lip of the cup (where the valve spindles actuate);

e) Number of strokes of valve spindles, *Max* : 60 per minute; and

f) Working surface of valve spindle: ground.

4. PACKING AND MARKING

4.1 Packing — The leather ' U ' cups shall be packed as agreed to between the purchaser and the supplier.

4.2 Marking — Each package shall be marked with the following information:

a) Name of the material;

b) Number of pieces;

c) Manufacturer's name or recognized trade-mark, if any;

d) Month and year of manufacture; and

e) Dimension(s) of the material(s).

4.2.1 The packages may also be marked with the ISI Certification Mark.

Note — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

5. SAMPLING

5.1 The scale of sampling and criteria for conformity shall be as prescribed in Appendix A.

TABLE 1 DIMENSIONS OF LEATHER CUPS ‘ U ’ (DOUBLE)

(*Clause* 3.3)

All dimensions in millimetres.

Sl No.	Dimensions (*see* Fig. 1)					Tolerance on			
	d	*D*	*T*	*V*	*S*	*d*	*D*	*V*	*S*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1)	*6	*14	4	5	1·5	+0·0 −0·3	±0·3	±0·5	±0·02
2)	*6	*20	7	8	2				
3)	7	15	4	5	1·5				
4)	*8	*16	4	5	1·5				
5)	*8	*20	6	7	2				
6)	9	17	4	5	1·5	+0·0 −0·3	±0·3	±0·5	±0·2
7)	*10	*18	4	5	1·5				
8)	*10	*22	6	7	2				
9)	*10	*25	7·5	8	2				
10)	*11	*22	5·5	7	1·5				
11)	*12	*25	6·5	8	2	+0·0 −0·3	±0·3	±0·05	±0·2
12)	*12	*28	8	9	2·5				
13)	*14	*25	5·5	7	2				
14)	14	30	8	9	2·5				
15)	*16	*28	6	7	2				
16)	*16	*32	8	9	2·5	+0·0 −0·3	±0·3	±0·5	±0·2
17)	18	30	6	7	2				
18)	*18	*32	7	8	2·5				
19)	18	34	8	9	2·5				
20)	*20	*32	6	7	2·5	+0·0 −0·5	±0·5		
21)	*22	*36	8	9	2·5	+0·0 −0·5	±0·5	±0·5	±0·2
22)	*20	*40	10	11	3				±0·3
23)	22	34	6	7	2				±0·2
24)	*22	*40	9	10	3				±0·3
25)	*25	*36	5·5	7	2				±0·2
26)	25	38	6·5	8	2	+0·0 −0·5	±0·5	±0·5	±0·2
27)	*25	*40	7·5	9	2·5				±0·2
28)	*25	*45	10	11	3				±0·3
29)	*28	*40	6	7	2				±0·2
30)	*28	*45	8·5	10	3				±0·3

*Preferred dimensions.

(*Continued*)

TABLE 1 DIMENSIONS OF LEATHER CUPS 'U' (DOUBLE) — *Contd*

All dimensions in millimetres.

SL. No.	DIMENSIONS (*see* FIG. 1)					TOLERANCE ON			
	d	*D*	*T*	*V*	*S*	*d*	*D*	*V*	*S*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
31)	28	48	10	11	3	+0·0 −0·5	±0·5	±0·5	±0·3
32)	*32	*45	6·5	8	2				±0·2
33)	32	48	8	9	2·5				±0·2
34)	32	52	10	11	3				±0·3
35)	32	56	12	13	3·5				±0·3
36)	34	50	8	9	3	+0·0 −0·5	±0·5	±0·5	±0·3
37)	36	52	8	9	3				
38)	40	56	8	9	3				
39)	*40	*60	10	11	3				
40)	*40	*70	15	16	3·5				
41)	42	58	8	9	2·5	+0·0 −0·5	±0·5	±0·5	±0·2
42)	45	63	9	10	3				±0·3
43)	45	65	10	11	3				
44)	45	75	15	16	3·5				
45)	48	68	10	11	3				
46)	*50	*70	10	11	3	+0·0 −0·5	±0·5	±0·5	±0·3
47)	*50	*80	15	16	3·5				
48)	52	72	10	11	3				
49)	55	85	15	16	3·5				
50)	55	75	10	11	3				
51)	56	75	9·5	11	3	+0·0 −0·5	±0·5	±0·5	±0·3
52)	56	88	16	17	3·5				
53)	58	78	10	11	3·5				
54)	*60	*80	10	11	3·5				
55)	*60	*90	15	17	3·5				
56)	63	82	9·5	11	3	+0·0 −0·5	±0·5	±0·5	±0·3
57)	63	90	13·5	15	3·5				
58)	63	95	16	17	3·5				
59)	68	92	12	13	3·5				
60)	*70	*90	10	11	3	+0·0 −0·8	±0·8		
61)	70	95	12·5	14	3·5	+0·0 −0·8	±0·8	±0·5	±0·3
62)	*70	*100	15	16	3·5				
63)	75	95	10	11	3				
64)	75	100	12·5	14	3·5				
65)	*80	*100	10	11	3				

*Preferred dimensions.

(*Continued*)

TABLE 1 DIMENSIONS OF LEATHER CUPS 'U' (DOUBLE) — *Contd*

All dimensions in millimetres.

Sl No.	Dimensions (*see* Fig. 1)					Tolerance on			
	d	*D*	*T*	*V*	*S*	*d*	*D*	*V*	*S*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
66)	80	105	12·5	14	3·5	+0·0 −0·8	±0·8	±0·5	±0·3
67)	*80	*110	15	16	3·5				
68)	85	105	10	11	3				
69)	85	110	12·5	14	3·5				
70)	*90	*110	10	11	3				
71)	90	115	12·5	14	3·5	+0·0 −0·8	±0·8	±0·5	± 0·3
72)	90	120	15	16	3·5				
73)	95	120	12·5	14	3·5				
74)	100	120	10	12	3	+0·0 −1·0	±1·0		
75)	*100	*125	12·5	15	3·5				
76)	100	130	15	17	4	+0·0 −1·0	±1·0	±0·5	±0·4
77)	*100	*140	20	22	4				
78)	105	135	15	17	4				
79)	110	130	10	12	3·5				±0·3
80)	*110	*140	15	17	4				±0·4
81)	110	150	20	22	4	+0·0 −1·0	±1·0	±0·5	±0·4
82)	120	150	15	17	3·5				±0·3
83)	120	160	20	22	4				±0·4
84)	*125	145	10	12	3·5				±0·3
85)	*125	150	12·5	15	3·5				
86)	125	155	15	17	4	+0·0 −1·0	±1·0	±0·5	±0·4
87)	*125	*160	17·5	20	4				±0·4
88)	130	150	10	12	3·5				±0·3
89)	130	160	15	17	4				±0·4
90)	135	160	12·5	15	3·5				±0·3
91)	*140	*160	10	12	3·5	+0·0 −1·5	±1·0	±0·5	±0·3
92)	140	165	12·5	15	4				±0·4
93)	140	170	15	17	4				
94)	*140	*180	20	22	4				
95)	145	170	12·5	15	4	+0·0 −1·5	±1·5		
96)	150	170	10	12	3·5	+0·0 −1·5	±1·5	±0·5	±0·3
97)	150	180	15	17	4				±0·4
98)	150	190	20	22	4				±0·4
99)	*160	*180	10	12	3·5				±0·3
100)	160	185	12·5	15	4				±0·4

*Preferred dimensions.

(*Continued*)

TABLE 1 DIMENSIONS OF LEATHER CUPS ‘ U ’ (DOUBLE) — *Contd*

All dimensions in millimetres.

SL No.	DIMENSIONS (*see* FIG. 1)					TOLERANCE ON			
	d	*D*	*T*	*V*	*S*	*d*	*D*	*V*	*S*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
101)	160	190	15	17	4	+0·0 −1·5	±1·5	±0·5	±0·4
102)	*160	*200	20	22	4				
103)	170	200	15	17	4				
104)	170	210	20	22	4				
105)	*180	*200	10	12	3·5	+0·0 −2·0	±2·0	±1·0	±0·3
106)	180	210	15	17	4	+0·0 −2·0	±2·0	±1·0	±0·4
107)	*180	*220	20	22	4				
108)	190	220	15	17	4				
109)	190	230	20	22	4				
110)	*200	*220	10	12	3·5				±0·3
111)	200	230	15	17	4	+0·0 −2·0	±2·0	±1·0	±0·4
112)	200	240	20	22	4·5				
113)	210	230	10	12	3·5				±0·3
114)	210	240	15	17	4				±0·4
115)	210	250	20	22	4·5				
116)	220	240	10	12	3·5	+0·0 −2·0	±2·0	±1·0	±0·3
117)	*220	*250	15	17	4				±0·4
118)	220	260	20	22	4·5				
119)	230	260	15	17	4				
120)	240	260	10	12	3·5				±0·3
121)	240	270	15	17	4	+0·0 −2·0	±2·0	±1·0	
122)	240	280	20	24	4·5				±0·4
123)	250	270	10	13	3·5				±0·3
124)	*250	*280	15	18	4				±0·4
125)	250	290	20	23	4				
126)	250	300	25	28	4·5	+0·0 −2·0	±2·0	±1·0	±0·4
127)	260	290	15	18	4				
128)	260	300	20	23	4·5				
129)	260	310	25	28	4·5				
130)	270	300	15	18	4·5				
131)	280	310	15	18	4·5	+0·0 −2·0	±2·0	±1·0	±0·4
132)	280	315	17·5	20	4·5				
133)	280	330	25	28	5				±0·5
134)	290	315	12·5	15	4				±0·4
135)	290	330	20	23	4·5				

*Preferred dimensions.

(*Continued*)

TABLE 1 DIMENSIONS OF LEATHER CUPS 'U' (DOUBLE) — *Contd*

All dimensions in millimetres.

Sl No.	Dimensions (*see* Fig. 1)					Tolerance on			
	d	*D*	*T*	*V*	*S*	*d*	*D*	*V*	*S*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
136)	300	330	15	19	4	+0·0 −2·0	±2·0	±1·0	±0·4
137)	300	340	20	24	4·5				
138)	300	350	25	29	5				±0·5
139)	315	345	15	19	4				±0·4
140)	315	355	20	24	4·5				±0·4
141)	315	365	25	29	5	+0·0 −2·0	±2·0	±1·0	±0·5
142)	320	350	15	20	4·5				±0·4
143)	330	360	15	20	4·5				±0·4
144)	330	370	20	25	5				±0·5
145)	330	380	25	30	5				
146)	355	385	15	20	5	+0·0 −2·0	±2·5	±1·0	±0·5
147)	355	400	22·5	27	5				
148)	355	405	25	30	5				
149)	360	390	15	20	5				
150)	370	400	15	20	5	+0·0 −2·5		±1·5	
151)	380	420	20	25	5	+0·0 −2·5	±2·5	±1·5	±0·5
152)	380	430	25	30	5				
153)	400	430	15	20	5				
154)	*400	*450	25	30	5				
155)	420	450	15	20	5				
156)	420	460	20	25	5	+0·0 −2·5	±2·5	±1·5	±0·5
157)	420	470	25	30	5				
158)	450	480	15	20	5				
159)	450	490	20	25	5				
160)	*450	*500	25	30	5				
161)	480	515	17·5	23	5	+0·0 −2·5	±2·5	±1·5	±0·5
162)	480	520	20	25	5				
163)	480	530	25	30	5				
164)	500	530	15	20	5				
165)	500	540	20	25	5				
166)	500	545	22·5	28	5	+0·0 −2·5	±2·5	±1·5	±0·5
167)	500	550	25	30	5				
168)	515	545	15	20	5				
169)	530	560	15	20	5				
170)	530	570	20	25	5				

*Preferred dimensions.

(*Continued*)

TABLE 1 DIMENSIONS OF LEATHER CUPS 'U' (DOUBLE) — *Contd*

All dimensions in millimetres.

SL No.	DIMENSIONS (*see* FIG. 1)					TOLERANCE ON			
	d	*D*	*T*	*V*	*S*	*d*	*D*	*V*	*S*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
171)	530	580	25	30	5	+0·0 −2·5	±2·5	±1·5	±0·5
172)	560	600	20	25	5				
173)	560	610	25	30	5				
174)	600	630	15	20	5				
175)	600	540	20	25	5				
176)	600	650	25	30	5	+0·0 −2·5	±2·5	±1·5	±0·5
177)	630	670	20	25	5				
178)	630	680	25	30	5				
179)	650	690	20	25	5				
180)	670	710	20	25	5				
181)	670	720	25	30	5	+0·0 −2·5	±2·5	±1·5	±0·5
182)	690	730	20	25	5				
183)	710	750	20	25	5				
184)	710	760	25	30	5				
185)	750	800	25	30	5				
186)	775	825	25	30	5	+0·0 −2·5	±2·5	±1·5	±0·5
187)	800	875	25	30	5				
188)	825	875	25	30	5				
189)	850	900	25	30	5				
190)	875	925	25	30	5				
191)	900	950	25	30	5	+0·0 −2·5	±2·5	±1·5	±0·5
192)	925	975	25	30	5				
193)	950	1 000	25	30	5				
194)	1 000	1 050	25	30	5				
195)	1 060	1 100	20	28	5				
196)	1 120	1 170	25	30	5	+0·0 −2·5	±2·5	±1·5	±0·5
197)	1 180	1 230	25	30	5				
198)	1 250	1 300	25	30	5				
199)	1 320	1 370	25	30	5				
200)	1 400	1 450	25	30	5				
201)	1 500	1 550	25	30	5	+0·0 −2·5	±2·5	±1·5	±0·5
202)	1 600	1 650	25	30	5				
203)	1 700	1 750	25	30	5				
204)	1 800	1 850	25	30	5				
205)	1 900	1 950	25	30	5				
206)	2 000	2 050	25	20	5	+0·0 −2·5	±2·5	±1·5	±0·5

*Preferred dimensions.

APPENDIX A

(*Clause* 5.1)

SCALE OF SAMPLING AND CRITERIA FOR CONFORMITY OF LEATHER SEALING CUPS ('U' CUPS)

A-1. SCALE OF SAMPLING

A-1.1 Lot — In a single consignment, all leather sealing cups of the same size, same shape and belonging to the same batch of manufacture shall constitute a lot.

A-1.2 For ascertaining conformity of the lot to the requirements of the specification, samples shall be tested from each lot separately.

A-1.3 The number of leather sealing cups to be selected from a lot shall depend on the size of the lot and shall be according to Table 2.

TABLE 2 SCALE OF SAMPLING

(*Clauses* A-1.3, A-1.3.2, A-2.1 *and* A-2.2)

Number of Leather Sealing Cups in the Lot	Visual and Dimensional Requirements		Performance Requirements	
	Sample Size	Acceptance Number	Sample Size	Acceptance Number
(1)	(2)	(3)	(4)	(5)
Up to 50	5	0	3	0
51 to 100	8	0	5	0
101 to 150	13	1	8	0
151 to 300	20	2	13	0
301 to 500	32	3	20	1
501 and above	50	5	32	2

A-1.3.1 These leather sealing cups shall be selected at random from the lot. In order to ensure the randomness of selection, procedures given in IS : 4905-1968* may be followed.

A-1.3.2 If the leather sealing cups are packed in boxes, at least 25 percent of the boxes shall be selected at random from the lot and equal number of items selected from each box so as to constitute the required sample size given in col 2 Table 2.

---

*Methods for random sampling.

A-2. NUMBER OF TESTS AND CRITERIA FOR CONFORMITY

A-2.1 The samples selected according to col 2 of Table 2 shall be examined for all requirements given in **3.1** to **3.4**. A leather sealing cup failing in one or more of these requirements shall be considered as defective. The lot shall be considered as conforming to these requirements if the number of defective sealing cups found in the sample is less than or equal to the corresponding acceptance number given in col 3 of Table 2.

A-2.2 The lot having satisfied **A-2.1** shall be further tested for performance requirements. For this purpose the number of sealing cups given in col 4 of Table 2 shall be taken. These may be taken from those already examined according to **A-2.1** and found satisfactory. Each of the sealing cups so selected shall be tested for performance requirements given in **3.5**. A sealing cup failing to meet the performance requirement shall be considered as defective. The lot shall be considered to conform to performance requirement if the number of defectives found in the sample is less than or equal to the corresponding acceptance number given in col 5 of Table 2.

A-2.3 The lot shall be declared as conforming to the requirements of the specification if **A-2.1** and **A-2.2** are satisfied.

INTERNATIONAL SYSTEM OF UNITS (SI UNITS)

Base Units

Quantity	*Unit*	*Symbol*
Length	metre	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamic temperature	kelvin	K
Luminous intensity	candela	cd
Amount of substance	mole	mol

Supplementary Units

Quantity	*Unit*	*Symbol*
Plane angle	radian	rad
Solid angle	steradian	sr

Derived Units

Quantity	*Unit*	*Symbol*	*Conversion*
Force	newton	N	1 N = 0·101 972 kgf
Energy	joule	J	1 J = 1 N.m
Power	watt	W	1 W = 1 J/s
Flux	weber	Wb	1 Wb = 1 V.s
Flux density	tesla	T	1 T = 1 Wb/m^2
Frequency	hertz	Hz	1 Hz = 1 c/s (s^{-1})
Electric conductance	siemens	S	1 S = 1 A/V
Pressure, stress	pascal	Pa	1 Pa = 1 N/m^2